

What is Claimed is:

1. An antiviral composition comprising a CCL5 polypeptide, wherein the CCL5 polypeptide inhibits infection by a virus of the Family Paramyxoviridae (paramyxovirus) in a mammalian subject.
2. The composition of claim 1, wherein the paramyxovirus is a respiratory syncytial virus (RSV).
3. The composition of claim 2, wherein the CCL5 polypeptide inhibits RSV infection by blocking the interaction between an RSV fusion (F) protein and a mammalian epithelial cell.
4. The composition of claim 3, wherein the CCL5 polypeptide is biologically inactive as a chemokine in a mammalian subject.
5. The composition of claim 1, wherein the mammalian subject is a human.
6. The composition of claim 1, wherein the CCL5 polypeptide comprises an amino acid sequence of SEQ ID NO:1.
7. The composition of claim 1, wherein the CCL5 polypeptide is an NH₂-terminus modified CCL5 polypeptide and wherein the NH₂-terminus modified CCL5 polypeptide is selected from the group consisting of an aminooxypentane-CCL5 (AOP-CCL5), a Met-CCL5, a N^α-nonanoyl-CCL5 (NNY-CCL5), a Δ1-2 truncated CCL5 and a Δ1-8 truncated CCL5.
8. The composition of claim 1, further comprising one or more CCL5 peptide fragments, wherein the fragments comprise about 10 to 20 contiguous amino acids of the CCL5 polypeptide of SEQ ID NO:1.
9. The composition of claim 8, wherein the one or more CCL5 peptide fragments are selected from the group consisting of

SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, SEQ ID NO:8, SEQ ID NO:9, SEQ ID NO:10, SEQ ID NO:11, SEQ ID NO:12, SEQ ID NO:13, SEQ ID NO:14, SEQ ID NO:15, SEQ ID NO:16, SEQ ID NO:17 and SEQ ID NO:18.

10. The composition of claim 9, wherein the CCL5 peptide fragment comprises an amino acid sequence of SEQ ID NO:2 and wherein the peptide fragment of SEQ ID NO:2 is further defined as an NH₂-terminal peptide of SEQ ID NO:1.
11. The composition of claim 1, wherein the CCL5 polypeptide is further defined as a human CCL5 polypeptide.
12. The composition of claim 1, further comprising a peptide mimetic of the NH₂-terminus of the CCL5 polypeptide of SEQ ID NO:1.
13. The composition of claim 12, wherein the peptide mimetic of the NH₂-terminus of the CCL5 polypeptide is a retroinverted CCL5 polypeptide comprising an amino acid sequence of SEQ ID NO:19, SEQ ID NO:20 or SEQ ID NO:21.
14. The composition of claim 1, further comprising an organic molecule which binds a CCR3 chemokine receptor.
15. The composition of claim 14, wherein the organic molecule is a CCR3 receptor antagonist.
16. The composition of claim 15, wherein the organic molecule comprises one or more chemical structures of formula I, II or III.
17. The composition of claim 1, further comprising an organic molecule which is a CCR1 antagonist or a CCR5 antagonist.

18. A peptide mimetic of the NH₂-terminus of a CCL5 polypeptide, wherein the peptide mimetic inhibits infection by a virus of the Family Paramyxoviridae (paramyxovirus) in a mammalian subject.
19. The peptide mimetic of claim 18, wherein the peptide mimetic is selected from the group consisting of a β -turn mimetic, a monocyclic β -turn mimetic, a bicyclic β -turn mimetic, a γ -turn mimetic or a monocyclic γ -turn mimetic.
20. An antiviral composition comprising the peptide mimetic of claim 19.
21. A method for preventing or inhibiting infection by a virus of the Family Paramyxoviridae (paramyxovirus) in a mammalian host, the method comprising administering to the host a pharmaceutically effective amount of the composition of claim 1.
22. A method for preventing or inhibiting infection by a virus of the Family Paramyxoviridae (paramyxovirus) in a mammalian host, the method comprising administering to the host a pharmaceutically effective amount of the composition of claim 18.